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10/561,080	12/18/2006	Janne J. Kallio	879A.0058.U1(US)	6061
29683 7590 02/22/2008 HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212			EXAMINER RIVERO, ALEJANDRO	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

AK

Office Action Summary	Application No. 10/561,080	Applicant(s) KALLIO ET AL.	
	Examiner Alejandro Rivero	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Finland on 06/19/2003. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: elements 106 and 118 of figure 1a; elements 106, 111 and 113 of figure 1b; elements 115 and 117 of figure 1c; element 462 of figure 4; elements 504, 520, 530 and 592 of figure 5a; elements 504, 520, 530 and 592 of figure 5b; elements 632 and 634 of figure 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains the phrases "The invention relates to" (line 1), "According to the invention" (line 3) and "The invention provides" (line 7), which can be implied. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities:

In page 2 (line 22), the examiner respectfully suggests replacing "not sufficient" with "not be sufficient".

In page 2 (line 26), the examiner respectfully suggests replacing "a the new" with "a new" or "the new".

In page 4 (line 9), the examiner respectfully suggests replacing "may also it's own" with "may also have it's own" or "may also use it's own".

In page 4 (line 25), the examiner respectfully suggests replacing "that the enables" with "that it enables".

In page 6 (line 13), the examiner respectfully suggests replacing "and exemplary" with "an exemplary".

Appropriate correction is required.

Claim Objections

5. Claims 1-38 are objected to because of the following informalities:

Claims 1-38 make alternate use of the words "characterized" and "characterised". Either version of the word is accepted, however, the examiner respectfully suggests using only one version for the purpose of uniformity throughout the claims.

In claim 9 (lines 1-2), the examiner respectfully suggests replacing "characterized in that said on the basis" with "characterized in that on the basis".

In claim 19 (lines 2-3), the examiner respectfully suggests replacing "Internet Protocol (IP) the first network" with "Internet Protocol (IP) between the first network".

In claim 35 (line 2), the examiner respectfully suggests adding "and", "or", ",", or other operator after the word "aircraft".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 5, 13-14, 17-18, 21-24, 28 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "establishing the satellite connection" in line 6. There is insufficient antecedent basis for this limitation in the claim. For the purpose of this examination, claim 1 will be treated as reciting "establishing a satellite connection", instead of the aforementioned phrase.

Claim 5 recites the limitations "the Abis link" in lines 2-3 and "the data transfer requirement" in line 3. There is insufficient antecedent basis for these limitations in the claim. For the purpose of this examination, claim 5 will be treated as reciting "an Abis link" and "a data transfer requirement", instead of the aforementioned phrases, respectively.

Claim 13 recites the limitations "the mobile terminal" and "the first network device" (both in line 2). There is insufficient antecedent basis for these limitations in the claim. For the purpose of this examination, claim 13 will be treated as reciting "a mobile terminal" and "the first network unit", instead of the aforementioned phrase.

Claim 14 recites the limitation "establishing the satellite connection" in line 6. There is insufficient antecedent basis for this limitation in the claim. For the purpose of this examination, claim 14 will be treated as reciting "establishing a satellite connection", instead of the aforementioned phrase.

Claim 17 recites the limitation "characterized in that said means for emulating signaling of the base station comprises means for transferring state messages with the base station controller" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim because there is prior mention of a base station, base station controller or means for emulating signaling to a base station. For the purpose of this examination, claim 17 will be treated as reciting "characterized in further comprising means for emulating signaling of a base station which comprise means for transferring state messages with a base station controller", instead of the aforementioned phrase.

Claim 18 recites the limitations "the Abis link" in line 3 and "the data transfer requirement" in line 3. There is insufficient antecedent basis for these limitations in the claim. For the purpose of this examination, claim 18 will be treated as reciting "an Abis link" and "a data transfer requirement", instead of the aforementioned phrases, respectively.

Claims 21-24 recite the limitation "A communication arrangement" (in line 1 of each of claims 21-24). There is insufficient antecedent basis for this limitation in the claims because claims 21-24 depend from a method-type claim. For the purpose of this examination, claims 21-24 will be treated as reciting "A communication method", instead of the aforementioned phrase.

Claim 28 recites the limitation "the first network device" (in line 3). There is insufficient antecedent basis for this limitation in the claim. For the purpose of this examination, claim 28 will be treated as reciting "the first network unit", instead of the aforementioned phrase.

Claim 33 recites the limitation "such as aircraft" (line 2). The phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention and it is unclear whether it includes elements not actually disclosed. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1, 8, 10, 12-14, 21, 22, 24, 26-29, 31, 33, 35, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criqui et al. (US 2002/0123344 A1) in view of Corbefein et al. (US 6,269,243 B1).

Consider claim 1 (and the rejection under second paragraph of 35 U.S.C. 112 above), Criqui et al. disclose a communication method for communication between a first network unit inside a vehicle (abstract, paragraphs [0011]-[0013], [0020], [0027], figure 1) and a second network unit of a terrestrial mobile communication system (abstract, paragraphs [0009], [0011]-[0013], [0020], [0027], figure 1, where Criqui et al. disclose making a call and transmitting voice), wherein said communication is directed via a satellite (abstract, paragraph [0012]), characterized in that the method comprises establishing a satellite connection when information transfer between the first network unit and the second network unit is required (abstract, paragraphs [0011]-[0015], where Criqui et al. disclose setting up a signaling link in response to a call set-up request, hence information transfer is required), releasing the satellite connection when information transfer between the first network unit and the second network unit is

not required (abstract, paragraphs [0011]-[0015] and [0026]-[0030], where Criqui et al. disclose clearing down (reads on releasing) a signaling link when it detects that no mobile telephones are switched on, hence information transfer is not required), emulating signaling of the second network unit for the first network unit (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose making a call and transmitting voice, which involves signaling between a first and second unit and further disclose that the equipment used is similar (hence emulating) to the equipment used in GSM radio telephone service), emulating signaling of the first network unit for the second network unit (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose making a call and transmitting voice, which involves signaling between a first and second unit and further disclose that the equipment used is similar (hence emulating) to the equipment used in GSM radio telephone service) and emulating during a released state of the satellite connection (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose setting up a signaling link in response to a call set-up request, hence the satellite link is in a released state).

Criqui et al. do not disclose that emulating of signaling of the first/second network unit for the second/first network unit occurs during a released state of satellite connection.

Corbefin et al. disclose emulating of signaling of the first/second network unit for the second/first network unit occurs during a released state of satellite connection (column 2 lines 6-33, column 2 lines 51-64, column 3 line 39- column 4 line 41, where Corbefin et al. disclose matching signals between reception and

transmission systems and converting formats (hence emulating) wherein reception and transmission can be made by satellite or ground/land networks, hence during a released state of satellite connection).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to emulate signaling of the first/second network unit for the second/first network unit using ground/land networks (hence during a released state of satellite connection) as taught by Corbfin et al. in the method of Criqui et al. in order to allow a user (such as a passenger on an aircraft) to make use of a personal radiotelephone (make/receive calls) under the same conditions of service as if located on land and in order to expand the coverage of service by adding ground/land network capability (as suggested by Corbfin et al. in column 1 line 33- column 3 line 4, column 4 lines 42-59).

Consider claim 14 (and the rejection under second paragraph of 35 U.S.C. 112 above), Criqui et al. disclose a communication arrangement comprising a first network unit for wireless communication with mobile stations inside a vehicle and a second network unit of a terrestrial mobile communication system (abstract, paragraphs [0011]-[0013], [0020], [0027], figure 1), the system comprising means for communicating between the first network unit and the second network unit via a satellite (abstract, paragraph [0012]), characterized in that the arrangement further comprises means for establishing the satellite connection when information transfer between the first network unit and the second network unit is required (abstract, paragraphs [0011]-[0015], where Criqui et al. disclose setting up a signaling link in response to a call set-up request,

hence information transfer is required), means for releasing the satellite connection when information transfer between the first network unit and the second network unit is not required (abstract, paragraphs [0011]-[0015] and [0026]-[0030], where Criqui et al. disclose clearing down (reads on releasing) a signaling link when it detects that no mobile telephones are switched on, hence information transfer is not required), means for emulating signaling of the second network unit for the first network unit (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose making a call and transmitting voice, which involves signaling between a first and second unit and further disclose that the equipment used is similar (hence emulating) to the equipment used in GSM radio telephone service), means for emulating signaling of the first network unit for the second network unit (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose making a call and transmitting voice, which involves signaling between a first and second unit and further disclose that the equipment used is similar (hence emulating) to the equipment used in GSM radio telephone service) and emulating during a released state of the satellite connection (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose setting up a signaling link in response to a call set-up request, hence the satellite link is in a released state).

Criqui et al. do not disclose that emulating of signaling of the first/second network unit for the second/first network unit occurs during a released state of satellite connection and wherein the second network unit is fixed.

Corbefein et al. disclose emulating of signaling of the first/second network unit for the second/first network unit occurs during a released state of satellite connection (column 2 lines 6-33, column 2 lines 51-64, column 3 line 39- column 4 line 41, figure 1, where Corbefein et al. disclose a corded telephone and matching signals between reception and transmission systems and converting formats (hence emulating) wherein reception and transmission can be made by satellite or ground/land networks, hence during a released state of satellite connection).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to emulate signaling of the first/second network unit for the second/first network unit using ground/land networks (hence during a released state of satellite connection) wherein the second unit is fixed as taught by Corbefein et al. in the method of Criqui et al. in order to allow a user (such as a passenger on an aircraft) to make use of a personal radiotelephone (make/receive calls) under the same conditions of service as if located on land and including making/receiving calls to/from users of fixed telephones and in order to expand the coverage of service by adding ground/land network capability and including the capability of making/receiving calls to/from users of fixed telephones (as suggested by Corbefein et al. in column 1 line 33- column 3 line 4, column 4 lines 42-59 and figure 1).

Consider claim 29, Criqui et al. disclose a first network unit arrangement for wireless communication with mobile stations inside a vehicle and a second network unit of a terrestrial mobile communication system (abstract, paragraphs

[0011]-[0013], [0020], [0027], figure 1), the first network unit comprising means for communicating information with the second network unit via a satellite (abstract, paragraph [0012]), characterized in that the arrangement comprises means for emulating signaling of the second network unit for the first network unit (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose making a call and transmitting voice, which involves signaling between a first and second unit and further disclose that the equipment used is similar (hence emulating) to the equipment used in GSM radio telephone service) and emulating during a periods when there is no communication via the satellite between the first network unit and the second network unit (abstract, paragraphs [0009], [0011]-[0031], figure 1, where Criqui et al. disclose setting up a signaling link in response to a call set-up request, hence satellite communication is not established).

Criqui et al. do not disclose that emulating of signaling of the first/second network unit for the second/first network unit occurs during a released state of satellite connection and wherein the second network unit is fixed.

Corbefin et al. disclose emulating of signaling of the first/second network unit for the second/first network unit occurs during a released state of satellite connection (column 2 lines 6-33, column 2 lines 51-64, column 3 line 39- column 4 line 41, figure 1, where Corbefin et al. disclose a corded telephone and matching signals between reception and transmission systems and converting formats (hence emulating) wherein reception and transmission can be made by

satellite or ground/land networks, hence during a released state of satellite connection).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to emulate signaling of the first/second network unit for the second/first network unit using ground/land networks (hence during a released state of satellite connection) wherein the second unit is fixed as taught by Corbefin et al. in the method of Criqui et al. in order to allow a user (such as a passenger on an aircraft) to make use of a personal radiotelephone (make/receive calls) under the same conditions of service as if located on land and including making/receiving calls to/from users of fixed telephones and in order to expand the coverage of service by adding ground/land network capability and including the capability of making/receiving calls to/from users of fixed telephones (as suggested by Corbefin et al. in column 1 line 33- column 3 line 4, column 4 lines 42-59 and figure 1).

Consider claims 12 and 26, Criqui et al. as modified by Corbefin et al. disclose all the limitations as applied to claims 1 and 14 above and also disclose that the information transfer is compliant with at least one of the following communication specifications: GSM, PCN, PCS, HSCSD, GPRS, EDGE, CDMA, WCDMA, Bluetooth, UMTS, Teldesic, Iridium, Inmarsat and WLAN (paragraphs [0023]-[0025] of Criqui et al. where Criqui et al. disclose a GSM network and interface).

Consider claims 21 and 33 (and the rejections under second paragraph of 35 U.S.C. 112 above), Criqui et al. as modified by Corbefin et al. disclose all the

limitations as applied to claims 1 and 29 above and also disclose wherein the vehicle is an aircraft (abstract paragraphs [0011]-[0013] of Criqui et al.).

Consider claims 8, 22 (and the rejection under second paragraph of 35 U.S.C. 112 above) and 35, Criqui et al. as modified by Corbfin et al. disclose all the limitations as applied to claims 1, 21 and 29 above. Criqui et al. further disclose wherein the vehicle is an aircraft (abstract, paragraphs [0011]-[0013]).

Criqui et al. do not disclose receiving flight status information from the avionics of the aircraft for controlling the first network unit.

Corbfin et al. disclose receiving flight status information from the avionics of the aircraft for controlling the first network unit (column 3 lines 13-24, column 4 lines 30-36, column 5 lines 1-9, where Corbfin et al. disclose prohibiting and controlling transmissions based on phases (reads on status) of the flight).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to receive flight status information from the avionics of the aircraft for controlling the first network unit as taught by Corbfin et al. in the method of Criqui et al. in order to prohibit/disable and control radiotelephone transmissions inside the aircraft when necessary (such as at low altitudes, take-off, landing) for safety purposes and to minimize conflict with terrestrial networks (as suggested by Corbfin et al. in column 3 lines 13-24, column 4 lines 30-36, column 5 lines 1-9).

Consider claims 10, 24 (and the rejection under second paragraph of 35 U.S.C. 112 above) and 37, Criqui et al. as modified by Corbfin et al. disclose all the limitations as applied to claims 8, 22 and 35 above and also disclose that the

flight status information comprises at least one of the following information: flight altitude, position and heading, doors open/closed, activate/deactivate mobile communications (column 3 lines 13-24, column 4 lines 30-36, column 5 lines 1-9, where Corbfin et al. disclose prohibiting and controlling transmissions based on phases of the flight including low altitude, take-off and landing).

Consider claims 13 and 28 (and the rejections under second paragraph of 35 U.S.C. 112 above), Criqui et al. as modified by Corbfin et al. disclose all the limitations as applied to claims 1 and 14 above and also disclose that a wireless connection between a mobile terminal and the first network unit is established by a wireless network inside the vehicle (paragraphs [0011]-[0013], [0023]-[0027]).

Consider claims 27 and 31, Criqui et al. as modified by Corbfin et al. disclose all the limitations as applied to claims 14 and 29 above and also disclose that the first network unit is a base transceiver station and the second network unit is a base station controller (paragraphs [0018]-[0030] of Criqui et al.).

Consider claim 38, Criqui et al. as modified by Corbfin et al. disclose all the limitations as applied to claim 29 above and also disclose that the first network unit is a base station controller and the second network unit is a base transceiver station (paragraphs [0018]-[0030], figure 1 of Criqui et al., where Criqui et al. disclose bidirectional communication and having base transceiver stations and base station controllers on both ends of the communication network).

11. Claims 2, 5, 7, 15, 18, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criqui et al. as modified by Corbefein et al. as applied above, and further in view of Sinivaara et al. (EP 1 096 699 A2, cited in applicant's IDS, hereinafter EP699) and Sinivaara (US 6,055,425, hereinafter US425).

Consider claims 2, 15 and 30, Criqui et al. as modified by Corbefein et al. disclose all the limitations as applied to claims 1, 14 and 29 above and also disclose signaling (abstract, paragraphs [0009], [0011]-[0031], figure 1 of Criqui et al., where Criqui et al. disclose making a call and transmitting voice, which involves signaling between a first and second unit and further disclose using GSM radio telephone service and communicating via satellite).

Criqui et al. as modified by Corbefein et al. do not specify LAPD link and Abis signaling.

EP699 discloses LAPD link signaling (paragraphs [0030], [0036]-[0039]).

US425 discloses Abis signaling (column 2 lines 12-34).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use LAPD link signaling as taught by EP699 and Abis signaling as taught by US425 in the method and arrangements of Criqui et al. as modified by Corbefein et al. in order to allow a user of a radiotelephone to process incoming and outgoing calls from inside an aircraft using a GSM radiotelephone service which uses Abis link signaling (as suggested by US425 in column 2 lines 12-34 where US425 discloses that a base station transceiver communicating via Abis link is considered operation in a known manner for GSM Cellular Telephone

System and Criqui et al. disclose that the system is similar to a GSM base station and that signaling conforms (hence operates in a known manner) to the GSM standard in paragraphs [0026]-[0028]) and in order to allow the user of a radiotelephone to process incoming and outgoing calls from inside an aircraft using GSM radiotelephone service via satellite and further multiplex plural calls on a single satellite channel since LAPD link protocol helps control speech channel satellite link CEPT E1-signaling which allows for plural calls to be supported by a single channel and signaling of all speech channels to be supported by a common channel (as suggested by EP699 in paragraphs [0029]-[0031] and as suggested by Criqui et al. in paragraphs [0018]-[0021]).

Consider claims 5, 18 (and the rejections under second paragraph of 35 U.S.C. 112 above) and 32, Criqui et al. as modified by Corbefein et al., EP699 and US425 disclose all the limitations as applied to claims 2, 15 and 29 above and also disclose wherein emulating means reserve capacity dynamically during the on state of the satellite connection (paragraphs [0011]-[0015] of Criqui et al. where Criqui et al. disclose setting up one or more signaling links, hence reserving capacity during on state of the satellite connection since at least for the second signaling link the satellite connection will have been established, reads on dynamic since the number of signaling links established varies depending on the number of call set-up requests) and wherein the capacity reserved is for an Abis link (column 2 lines 12-34 of US425 as applied to claims 2 and 15 above, where an Abis link is disclosed, hence capacity has been reserved for an Abis link), based on the data transfer requirement (paragraphs [0011]-[0015] of Criqui

et al. where Criqui et al. disclose setting up one or more signaling links based on number of call set-up requests).

Consider claim 7, Criqui et al. as modified by Corbfin et al., EP699 and US425 disclose all the limitations as applied to claim 5 above and also disclose that the data transferred between the first network unit and the second network unit is transferred as packet data according to Internet Protocol (paragraph [0031] of Criqui et al.).

12. Claims 3, 4, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criqui et al. in view of Corbfin et al. and further in view of Valentine (US 6,070,076).

Consider claims 3, 4, 16 and 17 (and the rejection under second paragraph of 35 U.S.C. 112 above), Criqui et al. as modified by Corbfin et al. disclose all the limitations as applied to claims 1 and 14 above and also disclose emulating signaling of a base station which comprises means for transferring messages with a base station controller (paragraphs [0018]-[0030], figure 1 of Criqui et al.) and transferring messages from a first to a second network unit and transferring messages from a second to a first network unit (paragraphs [0011]-[0030] of Criqui et al. where Criqui et al. disclose making a call which requires signaling between (back and forth signaling) base transceiver station and base station controller).

Criqui et al. as modified by Corbfin et al. do not specify state messages.

Valentine discloses states messages (column 6 line 34- column 7 line 14 where Valentine discloses a mobile station requesting to make a call and the

process involved therein requiring signaling between (back and forth) BSC and BTS in order to assign a communication channel and including state messages where BSC orders BTS to assign an idle channel and BTS acknowledges the order).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use state messages as taught by Valentine in the method and arrangement of Criqui et al. as modified by Corbefein et al. since state messages (such as BSC ordering BTS to assign an idle channel and BTS acknowledging the order) aid in the process of allocating a communication channel to an authorized user requesting to make a call (as suggested by Valentine in column 6 line 34- column 7 line 14).

13. Claims 6, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criqui et al. in view of Corbefein et al. as applied above, and further in view of Masuda et al. (US 2001/0034243 A1).

Consider claims 6 and 19, Criqui et al. as modified by Corbefein et al. disclose all the limitations as applied to claims 1 and 14 above and also disclose that additional data according to Internet Protocol (IP) is transferred between the first network unit and Internet via the satellite (paragraph [0031] of Criqui et al.), communication between the first network unit and the second network unit via a satellite (paragraphs [0018]-[0031] of Criqui et al.), communication of IP data transferred between the first network unit and the Internet (paragraphs [0018]-[0031] of Criqui et al. where Criqui et al. disclose implementing a link employing Internet Protocol).

Criqui et al. as modified by Corbefein et al. do not disclose prioritizing communication between first network unit and second network unit higher than IP data transferred between the first network unit and the Internet.

Masuda et al. disclose prioritizing communication between first network unit and second network unit (voice calls) higher than IP data transferred between the first network unit and the Internet (paragraphs [0194]-[0195] where Masuda et al. disclose prioritizing the type of information received based on expectation of use).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to allow for prioritizing communication between first network unit and second network unit (voice calls) higher than IP data transfers as taught by Masuda et al. in the method and arrangement of Criqui et al. as modified by Corbefein et al. in order to allow the user to establish which type of information is received with priority based on expectation of use (as suggested by Masuda et al. in paragraphs [0194]-[0195]).

Consider claim 20, Criqui et al. as modified by Corbefein et al. and Masuda et al. disclose all the limitations as applied to claim 19 above and also disclose that it comprises means for transferring data between the first network unit and the second network unit as packet data according to Internet Protocol. (paragraph [0031] of Criqui et al.).

14. Claims 9, 23 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criqui et al. as modified by Corbefein et al. as applied above, and further in view of Derosier et al. (US 2002/0016180 A1).

Consider claims 9, 23 (and the rejection under second paragraph of 35 U.S.C. 112 above) and 36, Criqui et al. as modified by Corbfin et al. disclose all the limitations as applied to claims 8, 22 and 35 above and also disclose that on the basis of the received flight status information communications between the first network unit and mobile stations inside the aircraft are barred (column 3 lines 13-24, column 4 lines 30-36, column 5 lines 1-9 of Corbfin et al., where Corbfin et al. disclose prohibiting and controlling transmissions based on phases (reads on status) of the flight).

Criqui et al. as modified by Corbfin et al. do not specify keeping mobile stations camped to the first network unit.

Derosier et al. disclose keeping mobile stations camped to the first network unit (paragraphs [0009], [0016]-[0019] where Derosier et al. disclose mimicking a base station in order to prevent wireless communication devices from making/receiving calls via real base stations, hence the wireless communication devices are camped in the communication device intervention system and barred from making/receiving calls).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to keep mobile stations camped to the first network unit (a device mimicking a base station) as taught by Derosier et al. in the system and arrangements of Criqui et al. and Corbfin et al. in order to prevent wireless communication devices from making/receiving calls in places where cellular telephone use is prohibited, discouraged or threatens to security and/or safety (such as hospitals or onboard airplanes), since camping the wireless

communication devices prevents them from finding real base stations to perform communication, thus ensuring that no calls are made/received in those areas (as suggested by Derosier et al. in paragraphs [0002]-[0003], [0009]-[0019] and as suggested by Corbefin et al. in abstract, column 3 lines 13-24 and column 5 lines 1-9).

15. Claims 11, 25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criqui et al. as modified by Corbefin et al. as applied above, and further in view of Young et al. (US 6,324,405 B1).

Consider claims 11, 25 and 34, Criqui et al. as modified by Corbefin et al. disclose all the limitations as applied to claims 1, 14 and 33 above and also disclose receiving communication information on another second network unit (paragraphs [0018]-[0025], figure 1 of Criqui et al. where Criqui et al. disclose at least two base transceiver stations (BTS2 and BTS3) in communication with a transceiver on board the aircraft), establishing communications between the first network unit and the other second network unit via the satellite on the basis of the received communication information (paragraphs [0018]-[0030], figure 1 of Criqui et al. where Criqui et al. disclose at least two base transceiver stations (BTS2 and BTS3) in communication with a transceiver on board the aircraft, via satellite, sending and receiving data and commands for setting up a transmission link), and releasing the communication between the first network unit and the second network unit via the satellite (paragraph [0030] of Criqui et al.).

Criqui et al. as modified by Corbefin et al. do not disclose receiving information from another satellite and establishing communication with another satellite.

Young et al. disclose receiving information from another satellite and establishing communication with another satellite (column 6 lines 30-66, column 9 line 28- column 10 line 46, figure 1 where Young et al. disclose communication using plural satellites and handover of satellites).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to receive information from another satellite and establish communication with another satellite as taught by Young et al. in the method and arrangements of Criqui et al. and Corbefin et al. in order to expand the service coverage area by allowing handover between satellites, thus providing global coverage (as suggested by Young et al. in column 6 lines 30-66, column 9 line 28- column 10 line 46, figure 1, figure 7a, figure 7b).

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alejandro Rivero whose telephone number is 571-272-2839. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR)

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